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MFRC Holds Third Annual Meeting

Forensic scientists, law enforcement officials, and representatives from the FBI and the National Institute of Justice gathered at Ames Laboratory for the third annual meeting of the Midwest Forensics Resource Center, May 23. New participants from Illinois and Kansas joined past participants from Iowa, South Dakota, North Dakota, Nebraska, Missouri, Wisconsin and Minnesota, along with representatives of Iowa State University, Ames Lab, and the Department of Energy's Argonne National Laboratory.

MFRC director and Ames Lab Environmental and Protection Sciences program director, David Baldwin provided an overview of the center's progress and a proposed program of work. He broke the activities into four major areas — casework, training, research and education — and offered examples in each area.

Casework efforts will focus on creating a Web-based database of forensic resources, using a previously developed database for veterinary response to livestock pathogens as a model. He indicated that the database is one way the center is helping Midwestern criminologists access outside expertise. As evidence of this work, the center will cover up to 40 hours of casework assistance if criminologists need to consult with a technical expert, such as a materials identification specialist.

Ames Laboratory's Todd Zdorkowski (left) and David Baldwin confer with Jane Homeyer, director of the Training Unit at the FBI academy. Homeyer urged the MFRC to consider becoming one of the FBI's training partners.

In the area of training, Baldwin said the center will serve as a venue to bring nationally recognized training to the region. "Rather than have the individual states spend money to send individuals out for training, we can bring the training programs here," he said. In addition, the center will create or customize training to meet the region's particular needs.

Thanks to $3 million in new federal funding, the MFRC will also support new forensic research. Later this summer, the center will issue a request for research proposals to ISU, Ames Lab and participating state crime labs. The center expects to fund up to 10 forensic research and development projects at roughly $55,000 each. Research emerging

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Experts Discuss Spector of Agro-terrorist Threat

When simply the rumor of an isolated outbreak of foot-and-mouth disease can send livestock commodity prices plummeting, the potential economic disaster of a deliberate terrorist attack to spread the disease is almost beyond comprehension. That was the sobering message delivered during a special session on agro-terrorism at the third annual meeting of the Midwest Forensics Resource Center, May 22.

The special evening session featured national animal disease experts and state agriculture and law enforcement authorities who are on the front lines in developing strategies to handle terrorist threats to the nation's animal food supply. Though the impact of a disease outbreak would be felt worldwide, the heavily agricultural Midwest would be especially hard hit.

Terry Knowles, Deputy Director of the Kansas Bureau of Investigation, pointed to a recent incident at a small livestock auction in Holton, Kansas, where several cattle appeared to exhibit symptoms associated with foot-and-mouth disease. Though tests quickly revealed that the cattle were not infected, the rumor of a potential outbreak raced throughout the country, causing commodity prices in Chicago to drop within hours of the initial discovery of the sick cattle.

"Imagine what an actual outbreak will cost, whether through natural circumstances or an intentional act," Knowles said, adding that it would be even more disastrous if the outbreaks were widespread. And that possibility exists since security around producer farms, processing plants, and auction facilities is lacking at best.

"Livestock auctions are a biosecurity nightmare," said Patrick Webb, veterinarian in charge of Iowa's response plan for the Department of Agriculture and Land Stewardship. "Animals are coming in and going out constantly. Depending on the pathogen, it can be spread just by the foot traffic of the producers attending the auction and then walking into their own feedlots."

Webb emphasized rapid response — rapid detection, rapid containment and eradication, and rapid recovery — as the best scenario should an outbreak occur, and he outlined the measures to be taken when an outbreak of foot-and-mouth disease is reported. A tight perimeter is established and all cloven-hoofed animals, including even wild whitetail deer, within the immediate area are destroyed. As a precaution, all similar animals within a secondary area are "depopulated" as well. Traffic into and out of the areas is controlled; workers and equipment in the "hot zone" are quarantined until disinfected. "You won't even be able to bring a cell phone out unless it can withstand being dunked in a vat of disinfectant," Webb said.

National Veterinary Services Laboratory Director Art Davis outlines various animal pathogens under study at the USDA research facility in Ames. Davis was one of several experts on hand for the Agro-terrorism special session held as part of the MFRC annual meeting.

Though controlling the spread of disease is the top concern, law enforcement officials also face the difficult task of conducting an investigation and collecting evidence to determine the source of the outbreak in the event the pathogen was deliberately released. While an important aspect, Knowles stressed that preventive measures should be the primary focus for law enforcement officials.

"We need to promote cooperation between agencies and between states," Knowles said. That includes building public awareness, working with producers to recognize and report suspicious activity, sharing information and developing new partnerships to carry out these activities. ■

~ Kerry Gibson

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from these projects would be shared among the region's crime labs.

In the final area, education, the center has facilitated the development of a forensic science curriculum at Iowa State. The MFRC expects to call a regional conference of crime labs and universities to discuss the new national recommendations for graduate education in forensic science.

"In all of these areas, we need to have your input," Baldwin stressed to the participants. "We want you to let us know just what your needs are and how we can best address those needs."

Other speakers during the meeting included Jane Homeyer, director of the Training Unit at the FBI academy. Homeyer highlighted the bureau's new virtual training academy and her efforts to make forensic training more readily available through secure Internet connections and regional training centers, and requested that the MFRC consider serving as one of the FBI's training partners.

Carl Bessman of the Iowa Criminalistics Laboratory and Ames Lab Engineering Services manager Terry Herrman explained the development of new fingerprinting equipment through a collaborative effort. Detailed plans for constructing the environmentally controlled fingerprint glove box were distributed. So far, the glovebox has allowed the ICL to process up to 300 percent more fingerprints than with conventional equipment.

Following a presentation by National Institute of Justice's Anjali Swienton on NIJ's Forensic Resources Network, the meeting broke into work sessions designed to gather input on research, casework, training and education efforts. ■

~ Kerry Gibson